

## **Shigellosis Outbreak**

**Summary:** The local and state health departments worked as a team to halt a major outbreak of a communicable disease by educating child care center staff and parents and applying the basic principles of infection control. Keeping the child care center open prevented wider spread of the disease throughout the community.

### **Detailed story:**

A local health department in a mid-sized town in the northwest part of Missouri received reports of numerous children with diarrhea, stomach cramps, and fever and positive tests for shigellosis in a local child care center. Shigellosis is a disease caused by bacteria that live only in humans. The bacteria can spread by passing from the stools or soiled fingers of one person to the mouth of another person or in food and water or by flies.

Shigellosis can spread very quickly in child care facilities. The affected center had a capacity of around 100 children; infants, toddlers, school-aged children, and adults associated with it had developed diarrhea. The local health department requested assistance from the Missouri Department of Health and Senior Services.

After much discussion, it was decided that it was best to keep the infected children in the child care center to avoid parents transferring their children to other centers and starting outbreaks there. For almost two weeks, state environmental public health specialists stayed at the child care center throughout its hours of operation (6:30 am – 6:00 pm) and observed hand washing, diaper changing, and food preparation. They spent time educating staff, parents, guardians, and children; answering questions; and giving take-home information to people as they picked up and dropped off children.

The child care center was divided (using furniture) so that those who had shigellosis could be kept separate from those who didn't. Local health department staff collected stool samples and transported them to the State Public Health Laboratory for testing. When a child recovered and had two negative stool tests, he or she was moved to the "well" side of the building. The interventions worked, and after about three weeks things were back to normal with better sanitation practices. The child care center went back to its usual routine, and its staff kept in touch with the public health team via conference calls every two days until the situation was resolved to be sure everyone was on top of the situation.